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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,943	12/27/2000	Gregory C. Flickinger	T721-17	6477

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EXPANSE NETWORKS, INC.  
6206 KELLERS CHURCH ROAD  
PIPERSVILLE, PA 18947

EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/24/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/748,943

Applicant(s)

FLICKINGER ET AL.

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 and 34-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 and 34-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2&amp;6</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/27/04 has been entered.

***Remark***

2. Claims 1-16 were canceled without prejudice (paper no. 7). Claims 17-36 are added (paper 7) and new claims 37-62 are added (paper 18). Pending claims are claims 17-62.

***Response to Arguments***

3. Applicant's arguments with respect to claims 17-62 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

*The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).*

5. Claims 37-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Arazi et al. (US Patent 5,966,120).

As for claim 37-40, Arazi discloses a method for receiving advertisements for storage, comprising receiving advertisements over same medium as content is received, and transmitted at a low bit rate; and storing the advertisements in a storage medium; then retrieving the advertisements from the storage medium, and presenting the advertisements to the subscribers (col. 3/lines 45-64; col. 4/lines 7-21; and col. 6/lines 12-34 for advertising data is transmitted using auxiliary data distributing in non real-time, using low or less bit rate required for real-time transmission, the ads is stored at local storage and the presentation is displaying to the user at a later time addressed). The medium has a predefined bandwidth, and the bandwidth used is based at least in part on bit rate that the content is transmitted (col. 1/lines 37-53 for a fixed communication channel as a predefined bandwidth; and col. 6/lines 13-34 for either CBR or VBR is used less bit rate than the bit rate required for real-time transmission).

As for claims 41 and 42, Arazi discloses an acceptable viewing quality is displaying the advertisement using low bit rate that is less than a bit rate required to present in real-time (col. 2/lines 27-44 as the prior art has already done so; and now is even a better improvement, col. 4/lines 7-55).

As for claims 43-46, Arazi inherently discloses “the low bit rate is a bursty bit rate”; “the receiving advertisement in a discontinuous fashion” and “over a plurality of discontinuous streams”; and “the low bit rate utilizes leftover bandwidth in the medium” because “a variable bit rate” is known for its characteristics as “bursty bit rate” in a “discontinuous fashion” and “over a plurality of discontinuous streams” versus the constant bit rate as a steady and stable bit rate. In addition, the VBR encoding technique utilizes up to 100% channel utilization without wasting the capacity of the stream (col. 4/lines 7-21).

As for claims 47-62, these claims are rejected for the reasons given in the scope of claims 37-46, with multiplexing technique also disclosed by Arazi not limited to Figs. 1-4, and col. 6/line 13 to col. 8/line 67 but through out the reference.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

7. Claims 17-22, 27-29, 32-33, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (U.S. Patent 6,463,585/or “Hendricks” hereinafter) in view of Arazi et al. (US Patent 5,966,120).

Regarding claims 17, 27 and 32-33, Hendricks discloses “in a television network environment” (Fig. 1) consisting of “a display device” (Fig. 3/item 222) “and a storage medium” (Fig. 4, item 267), a method for “delivering targeted advertisements to subscribers in advance of presentation of the advertisements to the subscribers”, i.e., a plurality of set top terminals 220 receives advertisements from a headend system 208 under a network controller 214 (Fig. 1, and col. 8/line 62 to col. 9/line 58) and stores the ads before presentation to subscribers (Fig. 34 for an ads storage), the method comprising: “transmitting advertisements within an advertisement channel to subscribers in advance of presentation of the advertisements to the subscribers”; and “storing the advertisements in a storage medium”, for instance, a 6 MHZ digital channel as the ad channel and that channel can either carry analog or digital signals (col. 9/line 65 to col. 10/line 26 for analog and digital services are included; and Fig. 32 for commercial channels on

available bandwidths, and col. 73/lines 13-55 for advertisement channels addressed), and advertisements not in real-time requires less bandwidth and not requiring additional feeder channel to continuously broadcasting targeted advertisements and advertisements can be stored locally in the set top box or memory medium 33 of set top terminal 220 or in an alternate view in Figure 34 with "Storage of Ads" at the set top terminal before retrieving for displaying to subscribers at a later time (Figs. 33-34, and col. 74/lines 4-16 for the Storage method; which means before the presentation of the advertisements to the user).

Hendricks does not disclose "the advertisements are transmitted at a bit rate that is less than the bit rate required to present the advertisement in real time" as pre-amended; however, the technique of providing a low bit rate, a variable bit rate that is less than the bit rate required for the real-time transmission, or in other words, in a non real-time transmission, for the advertisement to the user at a later time for use is taught by Azari (see col. 3/lines 45-64; col. 4/lines 7-21; and col. 6/lines 12-34 for advertising data is transmitted using auxiliary data distributing in non real-time, using less bit rate required for real-time transmission addressed). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks' system with a known technique as taught by Azari as Variable Bit Rate VBR encoding is applied for its advantage of reducing storage capacity requirements at either the headend or at server site (col. 1/lines 37-53).

As for claims 18-22, 28-29 and 36, in view of claim 17 above, Hendricks further discloses the steps of "wherein said transmitting includes transmitting the targeted advertisements"; "wherein the targeted advertisements are selected for the subscribers based on subscriber characteristics"; "wherein the subscriber characteristics includes at least some subset of demographic attributes, geographic attributes, psychological attributes, and viewing attributes"; further comprising "forming subgroups of subscribers that share one or more common subscriber characteristics, wherein said transmitting includes transmitting the

advertisements to the subgroups”; and “selecting targeted advertisements for the subgroups, wherein said transmitting includes transmitting the targeted advertisements to the subgroups”, i.e., a polling cycle routine and alternative advertisement targeting routine are used for targeting groups or subgroups of subscribers for advertisements based on at least some subset of their demographics attributes, geographic attributes, psychological attributes, and viewing attributes (Figs. 25-34, col. 66/lines 37-51 for user profile used for targeting advertisements; and col. 68/line 61 to col. 69/line 60 for polling technique; and col. 69/line 61 to col. 74/line 67 for a variety of techniques in targeting advertisements to users using demographics and viewing habits).

As for claim 35, in further view of claim 32 above, Hendricks further discloses “wherein said transmitting includes transmitting the advertisement off-peak”, i.e., ranking the programs based on different time slots during a given day, off peak time such as morning time slot (col. 75/lines 17-28 for ranking different viewing habits for different time slots during a day).

8. Claims 23-26, 30-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al (U.S. Patent 6,463,585 B1) in view of Azari et al (US Patent 5,966,120) and Schoenblum et al. (US Patent 6,418,122 B1/ or “Schoen” for short).

Regarding claims 23-26, 30-31 and 34, Hendricks does not mention the step of “transmitting the advertisements within the advertisement channel at a constant bit rate, a variable bit rate that changes over time according to the amount of bandwidth available for the advertisement channel, wherein the bandwidth available for the advertisement channel is based on bandwidth used and total bandwidth of the television network, wherein the bandwidth used includes bandwidth used for transmitting programming channels”; however, Schoen teaches a same technique in utilize the bandwidth in receiving bit stream of data and dynamically prevents the bandwidth overflow in broadcasting programs and commercials to subscribers (col. 1/lines

20-62), i.e., transmitting the advertisement channel can be at a constant bit rate because the rate at which the receiving device such as a set top box receives images is constant and can be varied at a variable rate, and with the example therein, a sequence of images of a commercial is less number of bits, or less bandwidth, or lower bit rate than other programs and that commercial is only a part of broadcasting programs or a part of the total bandwidth transmitted (col. 1/line 63 to col. 2/line 10 & col. 2/line 63 to col. 3/line 23 & col. 5/lines 1-20 due to changing conditions concerned; and Fig. 3, col. 5/line 65 to col. 6/line 39 for a solution). Therefore, it would have been obvious to one of ordinary skill in the art to modify Hendricks' system with Schoen's teaching technique of assuring sufficient bandwidth in broadcasting data including commercials or advertisements as disclosed in order to maximize and utilize most of available bandwidth in broadcasting technique as well as avoiding bandwidth overflowing as suggested by Scheon.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Safadi (US Patent 6,487,721 B1) and Eldering (US Patent 6,615,039 B1) discloses related advertising system with variable bit rate addressed.

10. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*



11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui  
Art Unit 2611  
May 14, 2004



KRISTA BUI  
PATENT EXAMINER